# Work Order ID 113880

*113880*



*February-24-14 2:34:49 PM*

**Item ID:** D4647-5 D4647-5 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:** B113880 **Stop** *NS2*

**Item Name:** Doubler

**Start Date:** 25/02/2014 **Start Qty:** 12.00 *12*

**Required Date:** 07/03/2014 **Req'd Qty:** 12.00 *12*

**Reference:**

**Cust Item ID:**

**Customer:**

**Approvals:** **Process Plan:** AM **Date:** 14-02-24 **Tooling:** _____ **Date:** _____

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

**Run Start** *NR1*

**Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| **Draw Nbr** / **Revision Nbr**: D4647 / B | | | | | | | | | |
| 110 | | 0.00 | | | | | | | |
| *110* | | | | | | 12 | 0 | | JM14-02-25 |
| Waterjet | **Memo** | 0.00 | | | | | | | |
| FLOW CNC Waterjet | 1-CUT AS PER DWG<br>DWG REV: B<br>PROG REV: B<br><br>2- Deburr | | | | | | | | |
| 120 | QC2- Inspect parts off machine FAI/FAIB | 0.00 | | | | | | | |
| *120* | | | | | | 12 | 0 | | JM14-02-25 |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

DQA: _____ Date: _____

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

**AGAINST DEPARTMENT/PROCESS**

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

| Root Cause | | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Design | ☐ | | | | | | | | | |
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Handling/Pre | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Offset/Setup | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Transport | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

**General**

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

# Work Order ID 113880

*February-24-14 2:34:49 PM*

*113880*

**Item ID:** D4647-5 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:**

**Item Name:** Doubler **Stop** *NS2*

**Start Date:** 25/02/2014 **Start Qty:** 12.00 *12*

**Required Date:** 07/03/2014 **Req'd Qty:** 12.00 *12*

**Reference:**

**Cust Item ID:**

**Customer:**

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

**Run Start** *NR1*

**Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 130 | QC8- Inspect parts - second check | 0.00 | | | | 12 | | | |
| *130* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 140 | Bend as per dwg | 0.00 | | | | | | | |
| *140* | | | | | | 12 | | | |
| Brake NC | **Memo** | 0.00 | | | | | | | |
| Brake NC | | | | | | | | | |
| 150 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | 12 | | | |
| *150* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

DAS 27 9-89 14/2/25

DAS 30 9-89

14/03/05

DAS 27 9-89 14/3/5

DQA: _____ Date: _____

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

**AGAINST DEPARTMENT/PROCESS**

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

| Root Cause | | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Design | ☐ | | | | | | | | | |
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Handling/Pre | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Offset/Setup | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Transport | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

**General**

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
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☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

# Work Order ID 113880

*February-24-14 2:34:49 PM*

*113880*

**Item ID:** D4647-5 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:**

**Item Name:** Doubler **Stop** *NS2*

**Start Date:** 25/02/2014 **Start Qty:** 12.00 *12*

**Required Date:** 07/03/2014 **Req'd Qty:** 12.00 *12*

**Reference:**

**Cust Item ID:**

**Customer:**

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

**Run Start** *NR1*

**Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 160 | Chemical Conversion Coat per QSI005 4.1 | 0.00 | | | | 12 | | | DAS 27 9-89 |
| *160* HandFinish Hand Finishing | **Memo** | 0.00 | | | | | | | |
| 170 | QC7-Inspect Chemical Conversion Coat | 0.00 | | | | 12 | | | DAS 27 9-89 |
| *170* QC Quality Control | **Memo** | 0.00 | | | | | | | |
| 180 | Identify as per dwg & Stock Location:_____ | 0.00 | | | | 12 | | | DAS 32 9-89 |
| *180* Packaging Packaging | **Memo** MF-5 | 0.00 | | | | | | | |

DQA: _____ Date: _____

# WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

**AGAINST DEPARTMENT/PROCESS**

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

| Root Cause | | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Design | ☐ | | | | | | | | | |
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Handling/Pre | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Offset/Setup | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Transport | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

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**Landing Gear**

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# Work Order ID 113880

*February-24-14 2:34:49 PM*

*113880*

**Item ID:** D4647-5 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:**

**Item Name:** Doubler **Stop** *NS2*

**Start Date:** 25/02/2014 **Start Qty:** 12.00 *12*

**Required Date:** 07/03/2014 **Req'd Qty:** 12.00 *12*

**Reference:**

**Cust Item ID:**

**Customer:**

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

**Run Start** *NR1*

**Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 190 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *190* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | 14-03-7 | | |
| Quality Control | | | | | | | | | |

14.03.06

DQA: _____ Date: _____

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

**AGAINST DEPARTMENT/PROCESS**

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Large Fab ☐ Composite ☐ Supplier ☐

| Root Cause | | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Design | ☐ | | | | | | | | | |
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Handling/Pre | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Offset/Setup | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Transport | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

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☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
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_____

# Picklist Print

*February-24-14 2:34:55 PM*



**Work Order ID:** 113880

*113880*

**Parent Item:** D4647-5

*D4647-5*

**Parent Item Name:** Doubler

**Start Date:** 25/02/2014 **Required Date:** 07/03/2014

**Start Qty:** 12.00 **Required Qty:** 12.00

**Comments:** IPP REV:A 13.06.20 NEW ISSUE DD VERF:JLM IPP REV:B
13.07.17 AS PER DWG REV.B DD VERF:JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M6061T6S.040 | | Purchased | No | | | 110 | sf | 166.7100 | 0.1098 | 2 | | | |

*M6061T6S.040*

6061-T6 .040 Sheet

**

JM14-02-25

| Location | Loc Qty | Loc Code |
|---|---|---|
| MAT021 | 166.71 | |
| m126350 | 61.3 | |
| m126981 | 105.41 | |

126350

DQA: _____ Date: _____

DART AEROSPACE

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

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Use-as-is ☐
Suspected Unapproved ☐

**AGAINST DEPARTMENT/PROCESS**

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
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| Root Cause | | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Design | ☐ | | | | | | | | | |
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Handling/Pre | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Offset/Setup | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Transport | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

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☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

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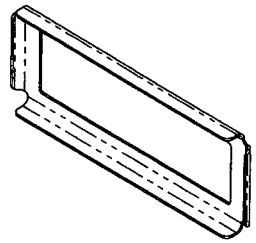
| DART AEROSPACE LTD | Work Order: | 113880 |
|---|---|---|
| Description: Doubler | Part Number: | D4647-5 |
| Inspection Dwg: D4647 Rev: B | | Page 1 of 1 |

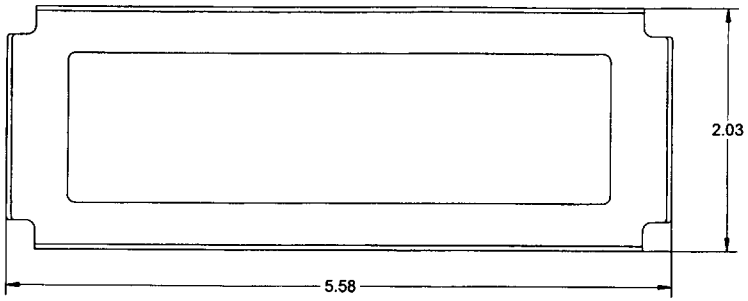
## FIRST ARTICLE INSPECTION CHECKLIST

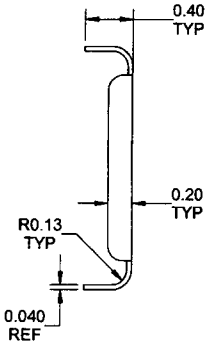
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|---|---|---|---|---|---|---|
| 0.93 | +/-0.030 | 0.938" | — | | ✓ | JTM01 |
| 17.00 | +/-0.030 | 17.00" | — | | T | JTM06 |
| 0.040 | +/-0.010 | 0.038" | — | | ✓ | |
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| Measured by: | Jm | Audited by: | DAS 27 0-89 | Preliminary Approval: | |
|---|---|---|---|---|---|
| Date: | 14-02-25. | Date: | 14/2/25 | Date: | |

| Rev | Date | Change | Revised by | Approved |
|---|---|---|---|---|
| A | 14.01.21 | New Issue | KJ | |






SHOP
RETURN
UNCON
SUBJ
W
W
NO. 113880 NP
14-02-24

**D4647-1 DOUBLER**

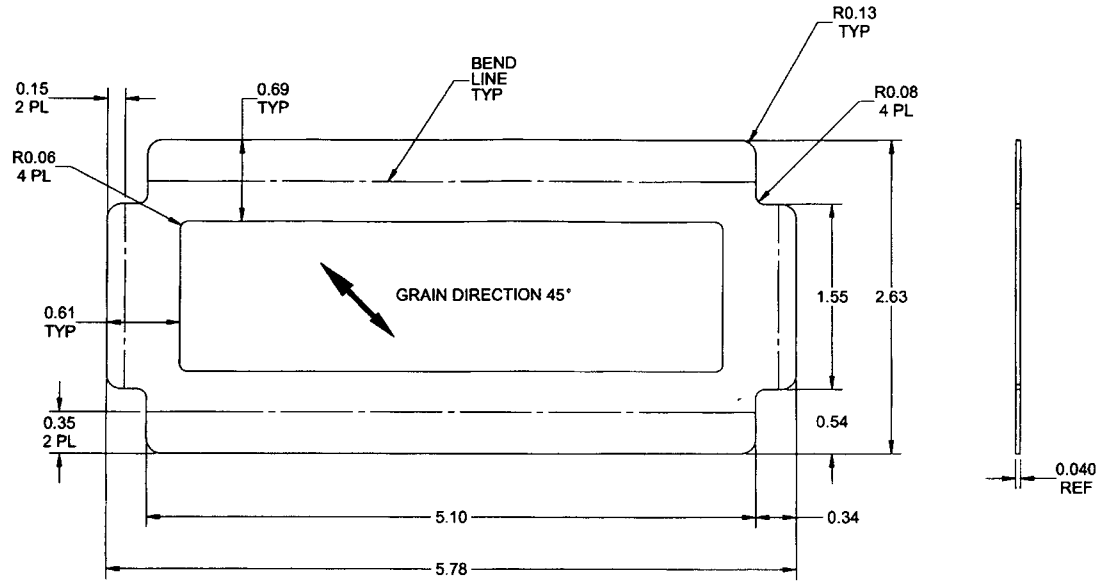
RELEASED
2013 -07- 15

NOTES:
1) MATERIAL: MAKE FROM D4647-1F FLAT PATTERN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.03 lbs

| REV. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| B | REVISE D4647-3/-3F (ZN B4-3, B4-4); ADD D4647-5 & -5F (ZN B4-5, C4-5); D4647-7/-8/-7F (ZN B4-8, B4-7, B4-8) | RF | 13.06.18 |
| A | NEW ISSUE | RF | 12.07.25 |

| | | | |
|---|---|---|---|
| DESIGN | RF | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | BC | DRAWING NO. D4647 | REV. B |
| MFG. APPR. | | | SHEET 1 OF 8 |
| APPROVED | | TITLE DOUBLER | SCALE NTS |
| DE APPR. | | | |
| DATE | 13.06.18 | | |

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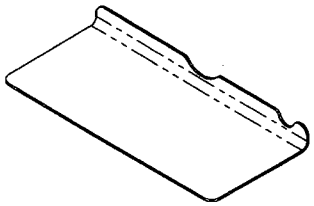

## D4647-1F FLAT PATTERN DOUBLER

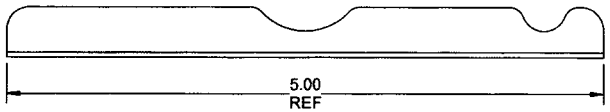
RELEASED
2013 -07- 15

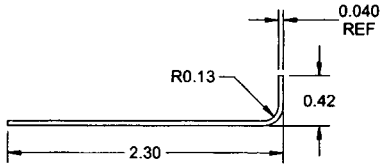
NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.03 lbs

| | | |
|---|---|---|
| DESIGN | RF | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |
| DRAWN | RF | DRAWING NO. D4647 REV. B |
| CHECKED | DC | SHEET 2 OF 8 |
| MFG. APPR. | | TITLE DOUBLER |
| APPROVED | | SCALE NTS |
| DE APPR. | | |
| DATE | 13.06.18 | |

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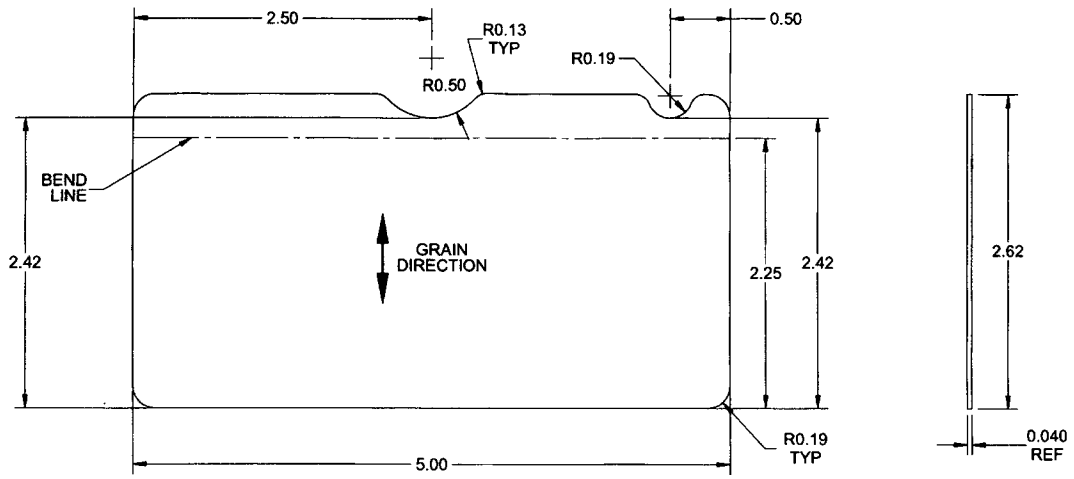

**D4647-3 DOUBLER** (B)

RELEASED
2013 -07- 15

NOTES:
1) MATERIAL: MAKE FROM D4647-3F FLAT PATTERN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.05 lbs

| | | |
|---|---|---|
| DESIGN | RF | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | RF | |
| CHECKED | | DRAWING NO. D4647 REV. B |
| MFG. APPR. | | SHEET 3 OF 8 |
| APPROVED | | TITLE DOUBLER SCALE NTS |
| DE APPR. | | |
| DATE 13.06.18 | | |

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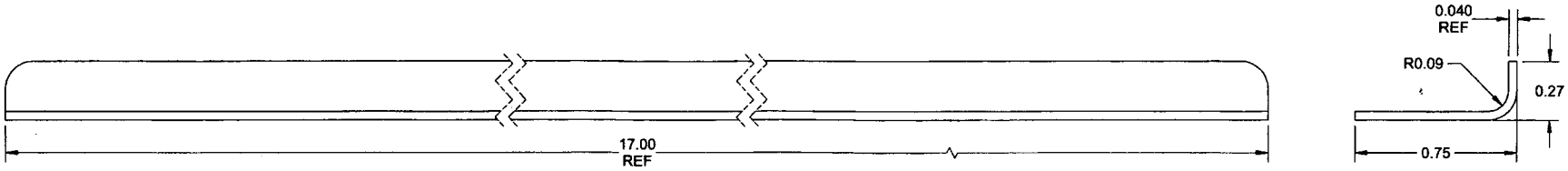

**D4647-3F FLAT PATTERN DOUBLER** (B)

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2013 -07- 15

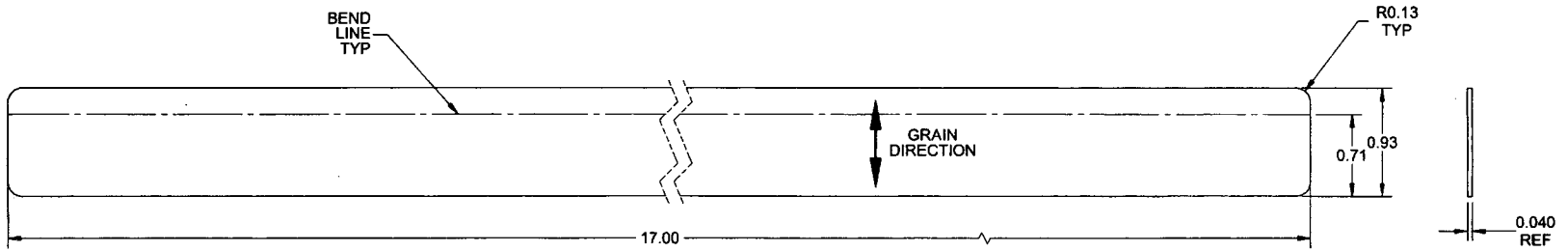
NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.05 lbs

| | | |
|---|---|---|
| DESIGN | RF | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | RF | DRAWING NO. D4647 REV. B SHEET 4 OF 8 |
| CHECKED | DC | TITLE DOUBLER SCALE NTS |
| MFG. APPR. | | |
| APPROVED | | |
| DE APPR. | | |
| DATE | 13.06.18 | |

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**D4647-5 DOUBLER** (B)
MAKE FROM D4647-5F FLAT PATTERN




**D4647-5F FLAT PATTERN DOUBLER** (B)

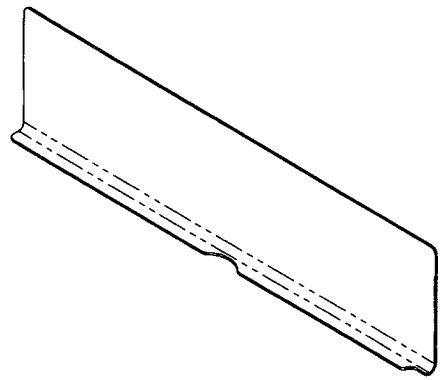
RELEASED
2013 -07- 15

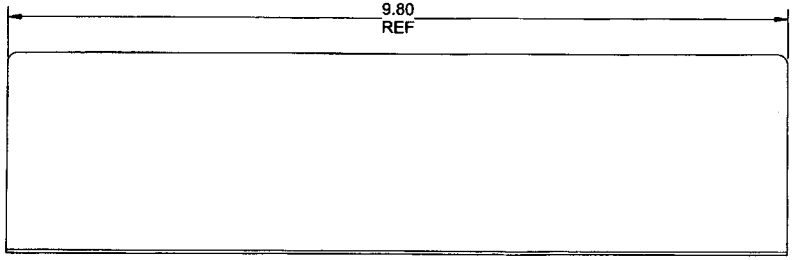
NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.040 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.06 lbs

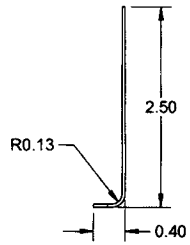
| | | |
|---|---|---|
| DESIGN | RF | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | RF | |
| CHECKED | BC | DRAWING NO. D4647 REV. B |
| MFG. APPR. | | SHEET 5 OF 8 |
| APPROVED | | TITLE DOUBLER SCALE NTS |
| DE APPR. | | |
| DATE | 13.06.18 | |

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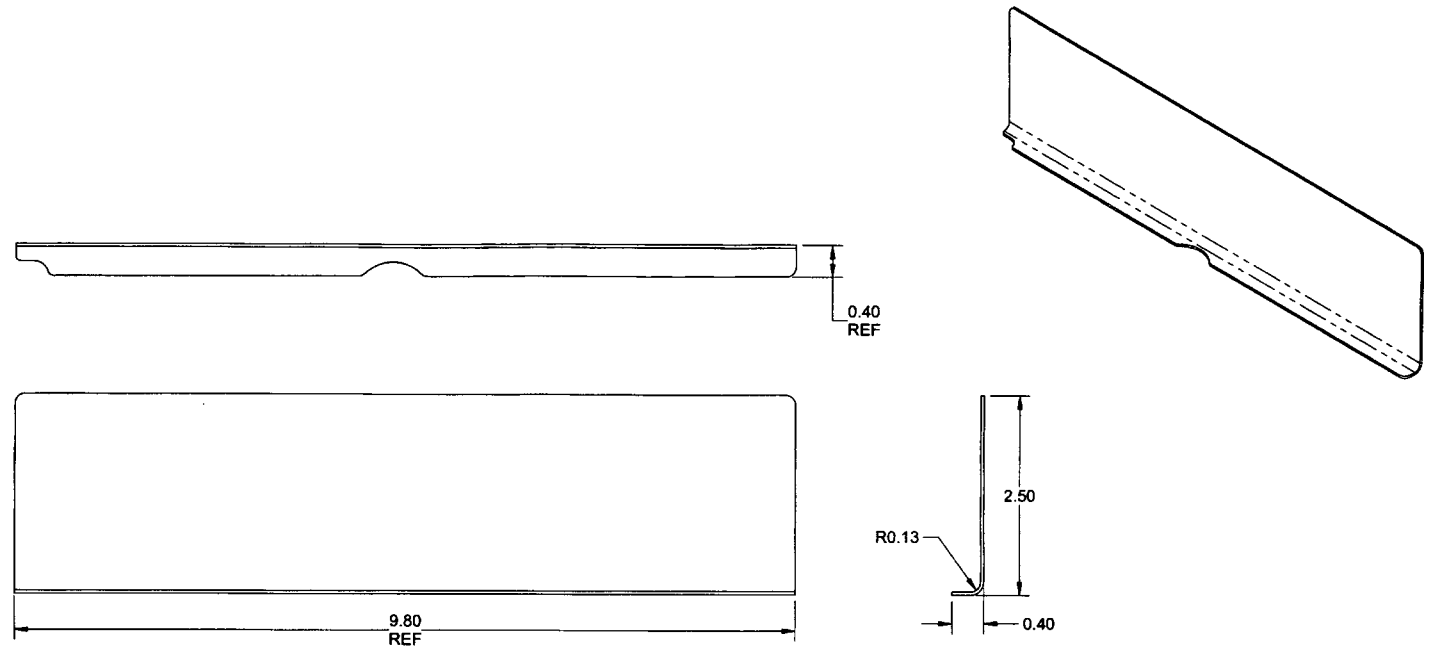

**D4647-7 DOUBLER** (B)

RELEASED
2013 -07- 15

NOTES:
1) MATERIAL: MAKE FROM D4647-7F FLAT PATTERN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.11 lbs

| | | |
|---|---|---|
| DESIGN | RF | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | RF | |
| CHECKED | DC | DRAWING NO. D4647 REV. B SHEET 6 OF 8 |
| MFG. APPR. | | |
| APPROVED | | TITLE DOUBLER SCALE NTS |
| DE APPR. | | |
| DATE | 13.06.18 | |

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**D4647-8 DOUBLER** (B)

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2013 -07- 15

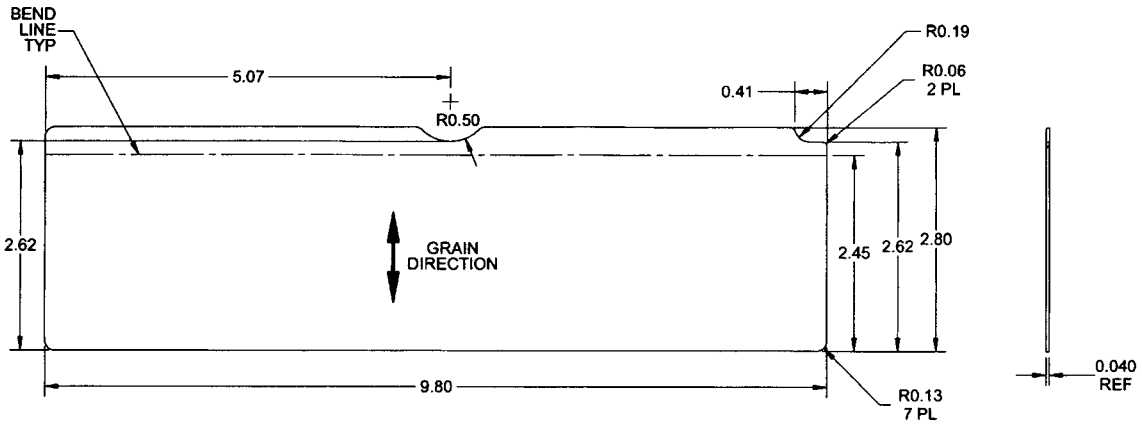
NOTES:
1) MATERIAL: MAKE FROM D4647-7F FLAT PATTERN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
7) WEIGHT: 0.11 lbs

| | |
|---|---|
| DESIGN | RF |
| DRAWN | RF |
| CHECKED | SC |
| MFG. APPR. | |
| APPROVED | |
| DE APPR. | |
| DATE | 13.06.18 |

**DART AEROSPACE LTD**
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D4647 REV. B
SHEET 7 OF 8
TITLE DOUBLER
SCALE NTS

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## D4647-7F FLAT PATTERN DOUBLER (B)

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NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.040
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.11 lbs

| | | |
|---|---|---|
| DESIGN | RF | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |
| DRAWN | RF | |
| CHECKED | DC | DRAWING NO. D4647 REV. B |
| MFG. APPR. | | SHEET 8 OF 8 |
| APPROVED | | TITLE DOUBLER SCALE NTS |
| DE APPR. | | |
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